BRUHAT BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK : DRILLING OF BOREWELLS IN WARD NO.02 OF YELAHANKA SUB-DIVISION

Estimate Cost Rs. 15.00 Lakhs

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	BOREWELL								
1	Geophysical investigations of site for sinking borewell for supplying drinking waster to the habitation either through the hand pump, MWS or PWSS by vertical electrical sounding by adopting verner or schlumbergers method. Including rerconnaissance survey of geological formation. Geeophysical investigation of existing ground water in the vicinity , nits quality, quantity and acceptabilkity7 of the users indicating the locations of site, recommended depth of casing pipe rerquired to seal the top unconsolidated formaation for proper depth of 1 meter in consolidating formation for proper seating of casing piupe depth of drilling required to cover dull deth of aquuifer proposed to be trapped propable yield and other information requirred including transportation of instrument and accessories to the work site, engaging technical personal and labour requirred (P-47. Item No.9.4)PRED SR 2012-13	No	2				2.00	1938.46	3877.00
2	Sinking of borewell of 165mm dia clear, using super fast hydralic rig of capacity 250 PSIG & above 900 CMF & above all strata including over burden up to 20m fixing of casing pipe, collars and capo with necessary cutting and threadimg including transportation of rig and swupporting vehicle, crew charges and copst of consumables etc., complete including yield testing at the final depth with a minimum working of comprressor for one hour (excluding cost of casing pipe, collers,cap) P-47. Item No.9.1)PRED SR 2012-13								
	0.00 to 50.00 mtrs	Rmtr	2	50.00			100.00	315.18	31518.00
3	50.00 to 100.00 mtrs		2	50.00			100.00	412.00	41200.00
4	100.00 to 150.00 mtrs		2	50.00			100.00	458.35	45835.00
5	150.00 to 200.00 mtrs		2	50.00			100.00	484.10	48410.00
6	200.00 to 250.00 mtrs		2	50.00			100.00	560.32	56032.00
7	250.00 to 300 mtrs		2	50.00			100.00	600.49	60049.00
8	Supply of ISI mark 175mm nominal bore plain end steel casing pipe grade of steel feet410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendment electric resistance welded tube material and confirming to IS 1387/1993 and manufactured by basic open harth electric or basic oxygen process in random length of 5 to 7 mts both ends threaded confirming to IS 4270:2001 and the other wnd with screwed pipes. All pipes shall be reasonally free from defects. the tubes shall be reasonably straight should be with ISI marking weighing 25.10 kg/mtr (inclusive of all taxes duties) price include coller. medium duty) P-III. Item No.84)	Rmtr	2	50.00			100.00	1325.00	132500.00
9	Providing 200mm dia PVC pipe 10kg/cm2 (SE PRED P.15 It.3.43)								

	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
		Rmtr							
			2	15			30.00	1721.13	51633.90
10	Providing and Supplying 175 mm dia MS cap (as per PREC SR 2012-13) etc complete as per specification								
		No's							
			2				2.00	100.00	200.00
11	Supply and delivery of submersible pump sets suitable for borewell of 165 mm dia with specified dyty conditions as detailed below and satisfying performance characteristics for pump and moter specified in BIS with ISI mark with a minimum efficiency of 42% pump shall confirm to IS 8034/2002 and motor conforming to IS 9283/1995 with ISI certification with latest amendments for the following.1.0 HP/75KW ATALANTA/SUGUNA/CRI/KIRLOSKAR /OTHER EQUIVALENT PUMPS (page no.XXXXII / Sl.No.33 Code No.2)2015-16								
		No's							
			2				2.00	70600.00	141200.00
12	Providing and fixing in trenches galvanised / mild steel tubes (medium grade) 50 mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. (SR of PWD for 2014-15, P.87, I-13.6)								
		Rmtr							
			2	220.00			440.00	544.32	239500.80
13	Supplying and drawing 3 crore flat PVC submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 to IS: 8130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100 volts.)P.No.49/ It.No.29c(1) 2.5sqm of 36 strands 0.3mm dia group-A KPWD Electrical SR 2014-15								
		Rmtr							
			2	1	290		580.00	188.70	109446.00
14	Erection of pump sets including alighning and balancing with all necessary erection of materials and labour including supply and erection of one pair of supporting clamps.one bporewell cap , cable clips, with bolts nuts valves guages,etc..,involved in the job (as per approved rate KUWS & DB for the year 2008-09)								
		Nos							
			2				2.00	3000.00	6000.00
15	Supply of heavy duty galvanised mild steel coller suitable for 50mm dia nominal bore galvanised mild steel								
		Nos							
			2	40			80.00	130.00	10400.00
16	Supply of non return valve suitable for 50mm dia nominal bore galvanised mild steel tube								
		Nos							
			2				2.00	1544.40	3088.80
17	Supply of on load charges over switches 4 poles 415V 5hr ac supply 100-125 amps group A								

	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
		Nos							
			2				2.00	9845.00	19690.00
18	Supply of automatic star delta starter unit push button type								
		No.							
			2				2.00	5665.00	11330.00
19	Erection of single phase preventor ammeters/including fixing sector switch/current operated earth leakage circuit breakers voltage operated circuit breaker abobe 100A fuse channel set (3 Nos) HRC fuses above 100A (3 Nos) including transportation charges from spot (P.28lt.16)								
		No.							
			2				2.00	1500.00	3000.00
20	fabricating supplying and mounting 1200x900x350 mm MS box of 18 SWG Suitable for floor/wall mounting fully weather proof with double stanted top as per drawing with provision for better haet dissipation provided with hinged front cover equipped with tamper proof locking arrangements with suitable size clamps with necessary cable entry pipe wqith gland and box should be finished with approved colour enamelled metal paint etc., complete box of 36200sqcm @ Rs0.20 SWG(BWSSB SR P-352 lt.41)								
		No.							
			2				2.00	7866.00	15732.00
21	Supplying and fixing miniature circuit breakers/solaters on existing MCB box distribution boards using necessary fixing materials and wiring complete as required 32 to 63 amps triple pole with all lead and lift, loading unloading and labour charges etc., complete as per specification (BWSSB SR P-352 lt.15)								
		No.							
			2				2.00	2090.00	4180.00
22	Supplying and running og GI copper strips of grounding connections using necessary fixing materials required 600x600x3mm GI Plate (P-378 lt.9)								
		No.							
			2				2.00	1072.00	2144.00
23	Supplying and fixing of porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washer etc., complete(P.32,lt.3 KPWD Electrical SR 2010-11)								
		No.							
			2				2.00	201.40	402.80
24	fabrication supplying and mounting MS box of 16 SWG Suitable for floor/wall mounting fully weather proof with provision for better heat dissipation provided with hinged front cover equipped with tamper proof locking arrangements with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primer paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600sqcm @ Rs0.33 SWG (P-49 lt.6.40.2) (KPWD Electrical Sr 2014-15)								
		No.							
			2	1	194	60	23280.00		
			2	1	400	25	20000.00		
							21600.00	0.33	7128.00

	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
25	Supplying and delivery at site brand neew star/essen/suns/adarsh/GK controls best indegenous make combined energy meter-cum-control panel board unit of size 600x450x200 mm minimum mechanically strong vermin proof and water proof the unit shall have two data cable doors suitable for operation on 3ph.50hz, 380/440 volts, AC supply with spring loaded latch locking devices with key ribs should be provided with doors, canopy apron and louvers ventilators shall be provided the combined energy meter cum control panel board suitable for operation the panel board shall be fabricated on single unit in the above components for suitable pumpsets (PRED Bangalore Circle SE Approved Date 30.07.2010 15HP to 30HP star Delta Starter)	No.	2				2.00	10000.00	20000.00
26	KSRB 13-6.3.1: Providing and fixing in position brass gate valve with C.I. wheel of approved quality (screwed end) 50 mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6 / 13.37 (Page No.91/Item No.13.33 PWD SR 2015-16)	Each	2				2.00	2160.00	4320.00
27	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanised steel wire/steel tape armored cable with PVC outer sheathing 101 KV class 4 crore 16 sqmm(P.W.D Electrical SR)	Rmtr	2	50.00			100.00	150.00	15000.00
28	Labour charges for laying of 1.1 KV class UG cable when supplied agency vin existing trench GI pipe3 stonewarre pipe/ on wall/ on pole as required (P.W.D Electrical Sr P-68, 1-11a)	Rmtr	2	50.00			100.00	8.00	800.00
29	Digging of trench of 0.6 m deep x 0.50 mtrs wide rrefilling the trench to the required ground level and consolidating etc completeP.W.D Electrical Sr P-68, 1-8.12b)	Rmtr	2	45.00			90.00	60.00	5400.00
30	Supplying and fixing of a class A (medium) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 Kv class 65mm (P.W.D Electrical Sr 08-09 P-68, 1-8.12b)	Rmtr	2	4.00			8.00	240.00	1920.00
31	Supplying, fixing, wiring, earth electrode for grounding conduits, IC cutouts & other equipments on the meter broad using 40mm dia 2.9 thick GI pipe 2.5 mtr long burried in a pitg. The pit should be filled withb equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. the connection from the pipe of ther conduit etc., is to bed establishe through GI wire size as over ISI specification 7.3.3 of IS 732 using 12mm dia bolts, nuts, washers and check nut etc, the pipe shall have 16 through holes of 122 mm dia (P.W.D Electrical Sr P-66, 1-7b)	No.	2				2.00	1495.00	2990.00

Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
Supplying ands fixing LT cast iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, Bolts, nuts & washers etc 4 crore 16 sqmm (P.W.D Electrical Sr 08-09 P-66, 1-16a)								
	No.							
		2				2.00	260.00	520.00
WATER SUPPLY								
33 Cutting of road surface for pipeline trenches and disposing the excavated stuff as directed including barricadding, danger lighting etc **in the Cement Concrete Road** (P.N. 264, I.N. 37.40)								
	Cum							
		4	100.00	0.60	0.20	48.00		
		2	40.00	0.60	0.20	9.60		
						57.60	643.42	37060.99
Basic Rate 607.00								
Area Weightage @ 6 % 36.42								
Total 643.42								
34 Cutting of road surface for pipeline trenches and disposing the excavated stuff as directed including barricadding, danger lighting etc **in the Asphalt Surface Road** (P.N. 257, I.N. 37.38)								
	Cum							
		1	300.00	0.60	0.20	36.00		
						36.00	360.40	12974.40
Basic Rate 340.00								
Area Weightage @ 6 % 20.40								
Total 360.40								
35 KSRB 2-2.1 : Earth work excavation for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No. KBS 2.1(a) / 2.3.5, No. 5/ Item No. 2.3)								
	Cum							
		4	100.00	0.60	0.60	144.00		
		2	40.00	0.60	0.60	28.80		
		1	300.00	0.60	0.60	108.00		
						280.80	200.34	56255.47
Basic Rate 189.00								
Area Weightage @ 6 % 11.34								
Total 200.34								
36 Providing and fixing to wall, ceiling and floor, high density polyethylene pipes 6.00 kgs/sq.cm working pressure 75mm outside diameter raising mains & exposed distribution pipes with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor including cost all material, labour charges, HOM of equipments and testing complete as per specifications.(P.N .94 I.N 13.73.4)								
	Rmtr							
		4	100.00			400.00		
		2	40.00			80.00		
		1	300.00			300.00		

Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
						780.00	320.12	249693.60
Basic Rate	302.00							
Area Weightage @ 6 %	18.12							
Total	**320.12**							
37 Refilling available earth around pipelines, cables in layers not exceeding 20cms in depth compacting each deposited layers by ramming after watering lead upto 50m and lift upto 1.5m including cost of labour complete as per specification (P. No.6 I.No.2.11)								
	Cum							
				Qty Vide Item No.35		280.80	80.56	22621.25
Basic Rate	76.00							
Area Weightage @ 6 %	4.56							
Total	**80.56**							
38 KSRB 13-6.3.1: Providing and fixing in position **brass gate valve** with C.I. wheel of approved quality (screwed end) 50 mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6 / 13.3 (Page No.91/Item No.13.37)								
	Each							
		7				7	2175.12	15225.84
Basic Rate	2052.00							
Area Weightage @ 6 %	123.12							
Total	**2175.12**							
39 Providing and fixing on position brass bib cock of approved quality 25mm dia nomial bore including cost of all materials labour and HOM of equipments with all leads complete as per specifications.(P.N.91 I.N 13.25)								
	Each							
		30				30.00	288.32	8649.60
Basic Rate	272.00							
Area Weightage @ 6 %	16.32							
Total	**288.32**							
40 Miscellaneous and unforeseen charges	LS							2071.55
						Grand Total Amount		1500000.00

(Rupees Fifteen Lakhs Only)

CERTIFICATE

1) The site has been inspected and the work is found to be necessary.
2) The rates adopted are as per PW,P IWTD SR of 2016-17 and data rate of Bangalore Circle.
3) The provisions were made in this estimate are necessary and adequate.
4) The area comes under the Bruhat Bengaluru Mahanagara Palike Limits.

Assistant Engineer
Ward No.02

Executive Engineer
Yelahanka Division
B.B.M.P

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P

Administrative Approval
Accorded For 15.00 lakh Rs.
Head of A/C P1771
CER NO : 186 Dt: 16/02/17

TA

CE (YNK)

TECHNICALLY SANCTIONED FOR Rs. 15.00 lakhs
Rupees Fifteen Lakhs Only
Under P. 1802 - 16.17
Registered as CE / [illegible] 99
Subject to conditions contained in enclosed memo CE ( ) No. /9/
Dt. EE/TS/70/16-17 Estimate A/ Sanctioned No.
Dated 16.2.17 Rs. 15.00 lakhs

Executive Engineer

YELAHANKA ZONE
WARD 2-CHOWDESHWARI WARD

A.E

Asst. Executive Engineer
Yelahanka Sub. Divison
(BBMP Ynk. Zn)
Yelahanka, Bangalore